

Claims:

1. Blister package opener apparatus comprising:
  - a blister package having blisters and a cover layer,
  - a frame connected to sides of the blister package,
  - an opener connected to the frame, and
  - a piercer connected to the opener for piercing the cover sheet with a direct inward motion of the opener.
2. The apparatus of claim 1, wherein the frame is a cover for connecting to the blister package and wherein the opener is connected to the frame by a flexible tether and further comprising a socket.
3. The apparatus of claim 2, wherein the frame has hinged front and back flaps secured to an edge of the blister package.
4. The apparatus of claim 2, wherein the frame covers all edges of the blister package.
5. The apparatus of claim 4, wherein a flap is connected to the frame and the tether is connected to the flap.
6. The apparatus of claim 4, wherein the frame further comprises a book cover hinged to the frame remote from the tether for closing the book cover over the cover layer tether.
7. The apparatus of claim 6, wherein the tether overlies the book cover when the opener is in the socket for holding the book cover closed.
8. The apparatus of claim 1, wherein the frame comprises a slide having joined front and back members for moving respectively over the blisters and over the cover layer and sliding along the blister package and wherein the openers are hinged at first ends to the frame and

wherein the piercers are mounted on second ends of the openers for moving the slide over the blister package, moving the front over the blisters and moving the back over the cover layer until an opener is adjacent a selected area of the cover layer opposite a selected blister and pushing on the opener and piercer for piercing the selected area of the cover.

9. The apparatus of claim 8, wherein the front member has bridges over the blisters and is sufficiently strong to provide a stabilizing base when pushing inward on the opener.

10. The apparatus of claim 8, wherein the front and back members are joined by a hinge.

11. The apparatus of claim 1, wherein the frame overlies edges of the blister pack and has rails along opposite edges and slides having ends connected to the rails for sliding along the rails a carriage moveable along the slides and wherein the opener is positioned on the carriage for moving with the carriage to a selected position adjacent a selected area of the cover layer opposite a selected blister for piercing the selected area and releasing contents of the selected blister.

12. The apparatus of claim 11, wherein areas of the cover layer opposite the blisters are provided with push in and liftable tabs.

13. The apparatus of claim 1, further comprising a tether having first and second ends, the first end connected to the frame, and a housing connected to the second end, a cutter movably disposed in the housing and a button connected to the housing for selectively exposing the cutter from the housing, wherein the frame further comprises pivoted arms mounted on swivels extending through the blister packages and wherein the openers are mounted on ends of the arms for selectively positioning the openers over selected areas of the cover layer opposite

selected blisters for pressing inward on the openers, piercing the selected areas of the cover layer and releasing contents of the selected blisters.

14. The apparatus of claim 13, further comprising a reset spring connected to the housing and to the cutter for resetting the cutter into the housing after cutting a blister.

15. The apparatus of claim 1, wherein the frame is adhered to and covering the cover layer and wherein the openers have opposite hinged and piercer ends and wherein the piercers are connected to the piercer ends and the piercers are curved.

16. The apparatus of claim 15, wherein the piercer ends are raised above the hinged ends.

17. The apparatus of claim 15, wherein the frame further comprises latches mounted near the piercer ends of the openers.

18. The apparatus of claim 17, wherein the latches comprise springs formed on the frame and tabs extending from the springs over the piercer ends of the openers for holding the openers inward until the springs and tabs are moved for preventing premature release of contents from the blisters.

19. The apparatus of claim 1, wherein the frame extends along opposite edges of the blister package and wherein the openers have slides connected to the frames, hinges connected to the slides and flaps connected to the hinges and wherein the piercers are mounted on the frame for positioning over selected areas of the foil cover layer opposite selected blisters for piercing selected areas of the foil cover layer for releasing contents of selected blisters.

20. The apparatus of claim 1, wherein the frame overlies edges of the blister package and wherein the openers are cantilevered inward from the frame and wherein the openers have free ends remote from the frame and the piercers are formed on the free ends of the openers.

21. The apparatus of claim 20, wherein the openers are movable between positions adjacent and outside of the foil cover layer and positions pierced through the foil cover layers for releasing contents of the blisters and for holding contents of the blisters within the blisters until the openers are intentionally lifted from the pierced foil cover layer.

22. Blister package opener apparatus comprising:

a blister package having blisters and a cover layer,  
a frame connected to a top of the blister package, and  
an opener connected to the frame.

23. The apparatus of claim 22, wherein the frame covers the cover layer and wherein the openers comprise lifting tabs having ends hinged to the frame.

24. The apparatus of claim 23, wherein the outer ends of the tabs are hinged to the frame and further comprising raised guards surrounding inner ends of the tabs, and bridges connecting the raised guards for raising inner ends of the tabs above the guards only when the blister package is bent, for grasping inner ends of the tabs and lifting the tabs around the hinges for providing access to the cover layer opposite a selected blister.

25. The apparatus of claim 23, wherein the tabs have side edges and further comprising frangible connectors connecting the side edges to the frame until the inner ends of the tabs are lifted.

26. Blister package opener method comprising:

providing a blister package having blisters and a cover layer,  
providing a frame connected to an edge of the blister package,  
providing an opener connected to the frame, and

piercing the cover sheet with a piercer connected to the opener with a direct inward motion of the opener.

27. The method of claim 26, wherein the frame is a cover for connecting to the blister package and wherein the opener is connected to the frame by a flexible tether and further comprising providing a socket.

28. The method of claim 27, wherein the frame has hinged front and back flaps secured to an edge of the blister package.

29. The method of claim 27, wherein the frame covers all edges of the blister package.

30. The method of claim 29, wherein a flap is connected to the frame and the tether is connected to the flap.

31. The method of claim 29, wherein the frame further comprises a book cover hinged to the frame remote from the tether for closing the book cover over the cover layer tether.

32. The method of claim 31, wherein the tether overlies the book cover when the opener is in the socket for holding the book cover closed.

33. The method of claim 26, further comprising moving a slide having joined front and back members, respectively, over the blisters and over the cover layer and moving the slide along the blister package and further comprising hinging the openers at first ends to the frame and wherein the piercers are mounted on second ends of the openers for moving the slide over the blister package, moving the front over the blisters and moving the back over the cover layer until an opener is adjacent a selected area of the cover layer opposite a selected blister and pushing on the opener and piercer for piercing the selected area of the cover.

34. The method of claim 33, wherein the front member has bridges over the blisters and is sufficiently strong to provide a stabilizing base when pushing inward on the opener.

35. The method of claim 33, wherein the front and back members are joined by a hinge.

36. The method of claim 26, wherein the frame overlies edges of the blister pack and has rails along opposite edges and slides having ends connected to the rails for sliding along the rails a carriage moveable along the slides and wherein the opener is positioned on the carriage for moving with the carriage to a selected position adjacent a selected area of the cover layer opposite a selected blister for piercing the selected area and releasing contents of the selected blister.

37. The method of claim 36, further comprising providing areas of the cover layer opposite the blisters with push in and liftable tabs.

38. The method of claim 26, further comprising providing on the frame pivoted arms mounted on swivels extending through the blister packages and further comprising mounting the openers on ends of the arms for selectively positioning the openers over selected areas of the cover layer opposite selected blisters for pressing inward on the openers, piercing the selected areas of the cover layer and releasing contents of the selected blisters.

39. The method of claim 38, wherein the pivoted arms are parallel arms and further comprising providing receivers in the blister package between blisters for receiving and holding the piercers on the openers.

40. The method of claim 26, further comprising adhering and covering the cover layer with the frame, and wherein the openers have opposite hinged and piercer ends, and further comprising connecting the piercers to the piercer ends, and wherein the piercers are curved.

41. The method of claim 40, further comprising raising the piercer ends above the hinged ends.

42. The method of claim 40, wherein the frame further comprises latches mounted near the piercer ends of the openers.

43. The method of claim 42, wherein the latches comprise springs formed on the frame and tabs extending from the springs over the piercer ends of the openers for holding the openers inward until the springs and tabs are moved for preventing premature release of contents from the blisters.

44. The method of claim 26, wherein the frame extends along opposite edges of the blister package and wherein the openers have slides connected to the frames, hinges connected to the slides and flaps connected to the hinges and further comprising mounting the piercers on selected areas of the cover layer opposite selected blisters and piercing the selected areas of the cover layer for releasing contents of the blisters.

45. The method of claim 26, wherein the frame overlies edges of the blister package and further comprising cantilevering the openers inward from the frame and wherein the openers have free ends remote from the frame and the piercers are formed on the free ends of the openers.

46. The method of claim 45, wherein the openers are movable between positions adjacent the cover layer and positions within the blisters for holding contents of the blisters within the blisters until the openers are intentionally lifted from the cover layer.

47. Blister package opener method comprising:  
providing a blister package having blisters and a cover layer,  
providing a frame connected to sides of the blister package, and

providing an opener connected to the frame.

48. The method of claim 47, further comprising covering the cover layer with the frame and wherein the openers comprise lifting tabs having ends hinged to the frame.

49. The method of claim 48, wherein the outer ends of the tabs are hinged to the frames and wherein raised guards surround inner ends of the tabs and bridges connect the raised guards for raising inner ends of the tabs above the guards when the blister package is bent for grasping inner ends of the tabs and lifting the tabs around the hinges for providing access to the cover layer opposite a selected blister.

50. The method of claim 48, wherein the tabs have side edges and wherein fractible connectors connect the side edges to the frame until the inner ends of the tabs are lifted.

51. The method of claim 47, wherein the opener tabs are printed with days or numbers arranged with frangible connectors for providing visual destruction confirmation that a particular tab has been opened, thus aiding in patient compliance and dose regimen tracking.